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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,744	09/15/2003	Gin Wu	021218.0009US2	1532
24392 FISH & ASSOC	7590 10/08/200 CIATES, PC	EXAMINER		
ROBERT D. FI	SH	MOULTON, ELIZABETH ROSE		
2603 Main Stre Suite 1000	ei	ART UNIT	PAPER NUMBER	
Irvine, CA 9261	14-6232	3767		
			MAIL DATE	DELIVERY MODE
			10/08/2009	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applicat	ion No.	Applicant(s)		
		10/662,7	744	WU, GIN		
		Examine	r	Art Unit		
		ELIZABE	ETH R. MOULTON	3767		
Period fo	The MAILING DATE of this commun r Reply	ication appears on th	ne cover sheet with the	correspondence a	ddress	
A SHO WHIC - Exter after - If NO - Failur Any r	DRTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE M sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comn period for reply is specified above, the maximum st e to reply within the set or extended period for reply seply received by the Office later than three months a d patent term adjustment. See 37 CFR 1.704(b).	AILING DATE OF T of 37 CFR 1.136(a). In no e nunication. atutory period will apply and will, by statute, cause the ap	THIS COMMUNICATION IN THE COMM	ON. imely filed m the mailing date of this IED (35 U.S.C. § 133).		
Status						
2a)⊠	Responsive to communication(s) file This action is <b>FINAL</b> . Since this application is in condition closed in accordance with the practi	2b)∏ This action is for allowance excep	ot for formal matters, p		ne merits is	
Dispositi	on of Claims					
5)□ 6)⊠ 7)□ 8)□ Applicati	Claim(s) <u>25-34</u> is/are pending in the 4a) Of the above claim(s) is/a Claim(s) is/are allowed. Claim(s) <u>25-34</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction Papers The specification is objected to by the	re withdrawn from or				
_	The drawing(s) filed on 9/15/03 is/are Applicant may not request that any obje Replacement drawing sheet(s) including The oath or declaration is objected to	ction to the drawing(s) the correction is requ	be held in abeyance. Se ired if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 C	, ,	
Priority u	nder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2)  Notice (3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Foration Disclosure Statement(s) (PTO/SB/08) of No(s)/Mail Date	'TO-948)	4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informal 6) Other:	Oate		

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 25-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not teach an opening extending through a cutting tip. The only embodiment showing an opening is Fig 8, opening 38. which is expressly disclosed as proximal the cutting tip. The other embodiments show notch or extended slot 18 extending from the tip proximally to an opening to the lumen, which opening is clearly proximal from the tip. See for example Fig 3a.

### **Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **opening extending through the cutting tip** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4.

## Claim Objections (Second Time)

1. Claim 30 is objected to because of the following informalities: the substance lacks antecedent basis. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 25,26,28,30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (US 5,261,818).

Shaw teaches a shaft (13) with a cutting surface (14), a lumen (18), with first (34) and second openings (22) and an open notch (26). Shaw also teaches a method of drilling through bone and injecting a substance through needle (Summary of the invention).

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw.

Shaw teaches the drill as above, but does not teach the length of the drill or the use of a hypodermic needle to inject the substance. It is well known in the art to provide medications in a hypodermic needle/syringe system and to inject the substance in the body. The lumen of the drill bit would be capable of use with a hypodermic needle and one of ordinary skill in the art at the time the invention was made would have expected the device to be used with a hypodermic needle.

Regarding claim 16, Shaw discloses the entire length of the drill is 20-25 mm (0.78-.98 inches). The notches do not extend the entire length of the drill, and appear to extend roughly  $\frac{1}{4}$ -  $\frac{1}{3}$  the length of the shaft (about 0.19 inches). The examiner believes this is

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"about 0.1-0.125 inches." Additionally, the drill bit is intended for use in the mouth of a human and therefore must meet some dimensional limits in order to be functional.

1. Claims 29, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw as applied to claims above, and further in view of Pshenichny (US 3,750,667).

Shaw does not teach a substantially smooth drill or a drill connected to a shaft as claimed. Pschenichny teaches a medical drill bit for delivering medicament to a space within the bone including a substantially smooth shaft (1), a hub (3) and a lumen extending through the hub (Fig 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hub and long smooth shaft to Pshenichny better control and handle the bit (hub) and perform injections deeper within the body (longer smooth area).

#### Response to Arguments

4. Applicant's arguments filed 14 August 2009 have been fully considered but they are not persuasive. It is the examiner's position that to the extent that Applicant's openings are at the "tip" or "end" of the needle so are Shaw's openings 22 which are directly adjacent the cutting surface of the needle. See also applicant's abstract which specifies the opening adjacent the tip, not through the tip. The open notch argument has been address by the board. Applicant's arguments regarding claim 31 are unclear. Claim 30 was anticipated, Claim 31 is obvious. As to Pschenichny, the hub is element 3, not 12. The lumen quite clearly extends beyond the hub in Fig 2, all the way to cannula 11.

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#### Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH R. MOULTON whose telephone number is (571)272-9970. The examiner can normally be reached on part-time R and F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ELIZABETH R MOULTON/ Examiner, Art Unit 3767 /Kevin C. Sirmons/

Supervisory Patent Examiner, Art Unit 3767